

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,469	11/05/2003	Ayumu Miyajima	503.38304CV2	8798
20457	7590 08/23/2004		EXAM	INER
ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800			GIMIE, MA	AHMOUD
			ART UNIT	PAPER NUMBER
ARLINGTON	, VA 22209-9889	3747		

DATE MAILED: 08/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ② MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Edetacions of time may be available under the proteins of 3C PER 1.39(a). In no event, however, may a reply be timely filed after 30 (b) MONTHS from the mailing date of this commentation. I state of the commentation of the commentation of the commentation of the commentation. I NO part of reply is specified above, the machine above the mac		•	11				
Examiner		Application No.	Applicant(s)				
Mahmoud Gimle 3747 — The MAILING DATE of this communication appears on the cover sheet with the correspondence address— Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. If the period for reply specified above is less than brilly (30) days, a reply the simily filed atter 18% (5) MONTHS from the mailing date of this communication. If the period for reply specified above is less than brilly (30) days, a reply the filed principle of the period for reply specified above, the mailman status period will apply and will explose (5) MONTHS from the melling date of this communication. If the period for reply specified above, the mailman statutory period will apply and will repleat (5) MONTHS from the melling date of this communication. If the period for reply specified above, the mailman statutory period will apply and will repleat (5) MONTHS from the melling date of this communication. Any reply received by the Office later than there months after the mailing date of this communication, even if timely filed, may reduce any seamed pattern than eligible for the communication. Any reply received by the Office later than there months after the mailing date of this communication, even if timely filed, may reduce any seamed pattern and eligible and the communication. Status 1) ■ Responsive to communication(s) filed on 0.05 November 2003. 2a) □ This action is FINAL. 2b) ■ This action is final. 2ciarric, 1 status application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Exparte Quayle, 1935 C.D. 11, 453 O.G. 213. Claim(s) 1-star rejected. 1ciarric, 1 star rejected. 2ciarric, 3 star rejected. 3ciarric, 1 star replected to by the Examiner. 1ciarric, 2 star replected to the st		10/700,469	MIYAJIMA ET AL.				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address—Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ② MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Extensive of time may be available under the provisions of 3 CFR 1.13(6). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. Period of the provision of the reply is specified down, the maximum station of provision in the mailing date of the communication. Failure to reply within the set or extended period for reply will, by statution, cause the application to become ABANDONED (SS U.S. © § 133). Any reply received by the Office Identification that the mailing date of this communication, even if finely filed, may reduce any caused patient term adjustment. See 37 CFR 1.74(9). Status 1) □ Responsive to communication(s) filed on <u>05 November 2003</u> . 2a) □ This action is FINAL. 2b) □ This action is private and provision of the provision of allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Exparte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) □ Claim(s) 1.4 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) 1.5 is/are allowed. 5) □ Claim(s) 2.4 is/are objected to. 8) □ Claim(s) 2.4 is/are objected to. 9) □ The specification is objected to by the Examiner. 10) □ The drawing(s) filed on <u>05 November 2003</u> is/are: a) □ accepted or b) □ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to by the Examiner. 10) □ The drawing(s) filed on <u>05 November 2003</u> is/are: a) □ accepte	Office Action Summary	Examiner	Art Unit				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available useder the promisers of 3° CPR 1.135(a). In one event, however, may a reply be timely filled - If the period for reply specified above, the maximum statutory period will apply and will apply on the first (30) days will be considered timely. - If NO period for reply is pecified above, the maximum statutory period will apply and will apply on the first (30) days will be considered timely. - If NO period for reply is pecified above, the maximum statutory period will apply and will apply on the period Str. (8) MONTH'S from the making also of this communication. - If NO period for reply is pecified above, the maximum statutory period will apply and will apply on the period Str. (8) MONTH'S from the making also of the somewhat the specified above, the maximum statutory period will apply and will apply on the specified above, the maximum statutory period will apply and will apply on the specified and on the seminary and the specific days of the specific days o							
THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be waited burden to provide and and the provided of the communication of 30°CR 1.3(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of file communication. If the period to reply specified shore is less than this (20) days, a reply within the studyor, minimum of histly (30) stays will be considered timely. If the period to reply specified shore is less than the remove is	The MAILING DATE of this communicati Period for Reply	on appears on the cover sheet w	ith the correspondence address				
This action is FINAL. 2b) ☐ This action is non-final. 3 ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) ☑ Claim(s) 1.4 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☑ Claim(s) is/are allowed. 6) ☑ Claim(s) are subjected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on <u>05 November 2003</u> is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☑ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☑ All b) ☐ Some * c) ☐ None of: 1.☐ Certified copies of the priority documents have been received in Application No. 10/214.312. 3.☐ Copies of the certified copies of the priority documents have been received in Application No. 10/214.312. 3.☐ Copies of the certified copies of the priority documents have been received in Application No. 10/214.312. 3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received.	THE MAILING DATE OF THIS COMMUNICAT - Extensions of time may be available under the provisions of 37 after SIX (6) MONTHS from the mailing date of this communication of the period for reply specified above is less than thirty (30) day if NO period for reply is specified above, the maximum statutory. Failure to reply within the set or extended period for reply will, the Any reply received by the Office later than three months after the set of the provided that the set of the set	FION. CFR 1.136(a). In no event, however, may a r stion. s, a reply within the statutory minimum of thir y period will apply and will expire SIX (6) MON by statute, cause the application to become AE	eply be timely filed by (30) days will be considered timely. ITHS from the mailing date of this communication. IANDONED (35 U.S.C. § 133).				
2a) This action is FINAL. 2b) This action is non-final. 3 Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s)	Status						
3 ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4 ☐ Claim(s) 1_4 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5 ☐ Claim(s) is/are allowed. 6 ☐ Claim(s) 1 is/are rejected. 7 ☐ Claim(s) 1 is/are rejected. 7 ☐ Claim(s) 2_4 is/are objected to. 8 ☐ Claim(s) are subject to restriction and/or election requirement. Application Papers 9 ☐ The specification is objected to by the Examiner. 10 ☐ The drawing(s) filed on 05 November 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11 ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12 ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No. 10/214.312. 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☐ Notice of References Cited (PTO-892) 20 ☐ Notice of Draftsperson's Patent Drawing Review (PTO-848) 5) ☐ Notice of Informal Patent Application (PTO-152)	1) Responsive to communication(s) filed or	n <u>05 November 2003</u> .	•				
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-4 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1 is/are rejected. 7) Claim(s) 2-4 is/are objected to. 8) Claim(s) 2-4 is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 05 November 2003 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 10/214.312. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 3) Notice of Draftsperson's Patent Drawing Review (PTO-848) 3) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Notice	2a) This action is FINAL . 2b)	☐ This action is FINAL . 2b) ☐ This action is non-final.					
All b Suscession of Claims 4) Claim(s) 1-4 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) is/are rejected. 7) Claim(s) are subjected to. 8) Claim(s) 2-4 is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 55 November 2003 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 10/214.312. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of References Cited (PTO-1449 or PTO/SB/08) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	3) Since this application is in condition for a						
4)	closed in accordance with the practice u	inder <i>Ex part</i> e Quayle, 1935 C.D	. 11, 453 O.G. 213.				
4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) ☒ Claim(s) is/are rejected. 7) ☒ Claim(s) are subjected to. 8) □ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) □ The specification is objected to by the Examiner. 10) ☒ The drawing(s) filed on of so accepted or b) □ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) □ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☒ All b) □ Some * c) □ None of: 1. □ Certified copies of the priority documents have been received in Application No. 10/214.312. 3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1 □ Interview Summary (PTO-413) Paper No(s)/Mail Date Paper No(s)/Mail Date 10 □ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Disposition of Claims						
5) ☐ Claim(s) is/are allowed. 6) ☒ Claim(s) _1 is/are rejected. 7) ☒ Claim(s) _2-4 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☒ The drawing(s) filed on _05 November _2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☒ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☒ Certified copies of the priority documents have been received in Application No. 10/214,312. 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) ☐ Notice of Informal Patent Application (PTO-152)	4) Claim(s) 1-4 is/are pending in the applic	ation.					
e) ☐ Claim(s) 1 is/are rejected. 7) ☐ Claim(s) 2-4 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☒ The drawing(s) filed on 05 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☒ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☒ Certified copies of the priority documents have been received in Application No. 10/214,312. 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) ☐ Notice of Informal Patent Application (PTO-152)	4a) Of the above claim(s) is/are w	rithdrawn from consideration.					
T) Claim(s) 2-4 is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 05 November 2003 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 10/214,312. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) * Notice of Dirattsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) Notice of Informal Patent Application (PTO-152)	5) Claim(s) is/are allowed.	Claim(s) is/are allowed.					
Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 05 November 2003 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 10/214,312. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 20 Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) Notice of Informal Patent Application (PTO-152)	6)⊠ Claim(s) <u>1</u> is/are rejected.	Claim(s) <u>1</u> is/are rejected.					
Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on <u>05 November 2003</u> is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☑ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☑ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☑ Certified copies of the priority documents have been received in Application No. <u>10/214,312</u> . 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☐ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	7)⊠ Claim(s) <u>2-4</u> is/are objected to.						
9) ☐ The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on 05 November 2003 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☑ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☑ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☑ Certified copies of the priority documents have been received in Application No. 10/214,312. 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☐ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	8) Claim(s) are subject to restriction	and/or election requirement.					
10) The drawing(s) filed on 05 November 2003 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 10/214,312. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) Notice of Informal Patent Application (PTO-152)	Application Papers						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 10/214,312. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	9) The specification is objected to by the Ex	caminer.					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some colonic None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 10/214,312. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) Notice of Informal Patent Application (PTO-152)	10)⊠ The drawing(s) filed on <u>05 November 20</u>	_ · · · · · · · · · · · · · · · · · · ·					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 10/214,312. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) Notice of Informal Patent Application (PTO-152)	Applicant may not request that any objection	to the drawing(s) be held in abeyar	nce. See 37 CFR 1.85(a).				
Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 10/214,312. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 1 Notice of Informal Patent Application (PTO-152)	Replacement drawing sheet(s) including the	correction is required if the drawing	(s) is objected to. See 37 CFR 1.121(d).				
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 10/214,312. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 1 Notice of Informal Patent Application (PTO-152)	11)☐ The oath or declaration is objected to by	the Examiner. Note the attached	d Office Action or form PTO-152.				
a) \[All \] b) \[Some * c) \[None of: \] 1. \[Certified copies of the priority documents have been received. \] 2. \[Certified copies of the priority documents have been received in Application No. \(\frac{10/214,312}{3.} \) 3. \[Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) \[\] Notice of References Cited (PTO-892) \] 2) \[\] Notice of Draftsperson's Patent Drawing Review (PTO-948) \] 3) \[\] Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) \] 5) \[\] Notice of Informal Patent Application (PTO-152)	Priority under 35 U.S.C. § 119						
2. ☐ Certified copies of the priority documents have been received in Application No. 10/214,312. 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☐ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) ☐ Notice of Informal Patent Application (PTO-152)	a)⊠ All b)□ Some * c)□ None of:		3 119(a)-(d) or (f).				
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152)			nnlication No. 10/214 312				
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) * See the attached detailed Office action for a list of the certified copies not received. 4) Interview Summary (PTO-413) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152)	•						
* See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) * See the attached detailed Office action for a list of the certified copies not received. 4) Interview Summary (PTO-413) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152)	•		Tecerved III tills Hattorial Gtage				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152)	• •		received.				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152)							
Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Notice of Informal Patent Application (PTO-152)	Attachment(s)						
3) 🔯 Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) 🖳 Notice of Informal Patent Application (PTO-152)		4) Interview S					
	2) Notice of Draftsperson's Patent Drawing Review (PTO-9	(48) Paper No(s					

Application/Control Number: 10/700,469

Art Unit: 3747

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35
 U.S.C. 102 that form the basis for the rejections under this section made in this
 Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors

Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology

Technical Amendments Act of 2002 do not apply when the reference is a U.S.

patent resulting directly or indirectly from an international application filed before

November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipate by Shibata et al (6,092,743).

Shibata discloses a fuel injection valve (1) for injecting fuel, wherein a fuel spray (47) injected from the fuel injection valve includes a first portion having a long spray (L_1) reaching distance and a second portion having a short spray (L_2) reaching distance, wherein the first portion consists essentially of a fuel rich

Application/Control Number: 10/700,469

Art Unit: 3747

portion and the second portion consists essentially of a fuel lean spray portion, see figures 6A, 6B, and column 4-lines 30-39.

With regard to anticipation of rich and lean, referring to figures 6A and 6B,Shibata teaches that a compact fuel spray can be obtained for "concentrating the fuel spray around the ignition plug", column 4 and lines 30-32, which is similar to "fuel rich spray" directed toward the ignition plug. On the other hand, since Shibata singles out the area around the spark plug as an area with high fuel concentration, anticipates the areas further away from the spark plug as having less concentration of fuel or "fuel lean" areas. Therefore, the reference anticipates the claimed subject matter of claims 1.

Allowable Subject Matter

3. Claims 2-4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The <u>allowable subject</u> matter is related to the fuel <u>spray crossing a central axis line</u> of an injection hole in the fuel injection.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mahmoud Gimie whose telephone number is 703-305-1037. The examiner can normally be reached on Tuesday-Friday between 7 a.m. -3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Yuen can be reached on 703-308-1946. The fax

Art Unit: 3747

phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MG

MAHMOUD GIMIE PRIMARY PATENT EXAMINER ART UNIT 3747